

Merryfield Owners Association

Fire Identification, Prevention, and Mitigation 2025

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(Note: This document is for Information Only)

Purpose

Identify fire hazards, factors, controls, and mitigation actions to the Merryfield neighborhood and the urban interface with the Graham Oaks Nature Park and Tranquil City Park.

Background

On January 30, 2025 the homeowners of the Merryfield Owners Association held their Annual meeting required by the bylaws of the association. During this meeting a committee was formed to address concerns regarding risk factors related to wildfire potential and wildfire preventative measures currently in place along the urban interface boundary with the Graham Oaks Nature Park; located west of the Merryfield development owned and maintain by Metro; and Tranquil Park located east of the development owned and maintained by the City of Wilsonville.

Residents within the Merryfield community have voiced their justifiable concerns with the deficiencies in defensible spaces, lack of access due to invasive plants, overgrowth of underbrush, buildup of litter fuels and duff. Therefore, producing an elevated fire risk to homeowners, and reducing access points to first responders in the event of an incident.

- **Grahams Oak Nature Park** - is a 250-acre nature park which includes wetland, woodland, and a conifer forest. Opening to the public on Sept 18, 2010, this park serves as a nature preserve for wildlife, and native plant species, with walkable surfaced and unsurfaced pathways.
- **Tranquil Park** - is a 4.57-acre greenway with a conifer forest and a local access trail located along Parkwood Lane and Brown Road.

Exposure Risks

Wildfire Transmission Zones- Graham Oaks Nature Park is considered a Wildfire Transmission Zone (WTZ). These transmission zones are areas that are close to structures where flammable vegetation exposes our community to a greater fire risk.

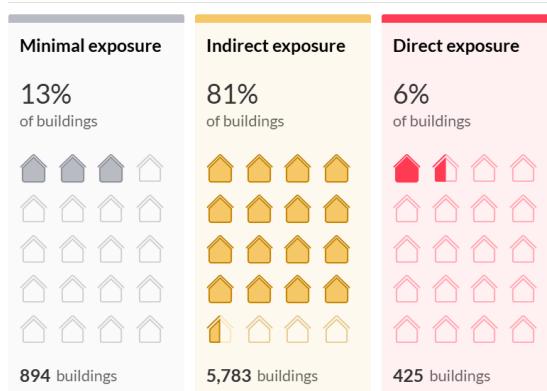
Direct Exposure Zones- Homeowners in the Merryfield area along the Southwest/West facing portion of the development which include Camelot St, Merlin Ct, Roland Ct., Parkwood Ln, and Arthur Ct. contain an estimated 38 residential structures in the Direct Exposure Zone (DEZ) risk category. These dwells are directly adjacent to the Graham Oaks Nature Park and Merryfield Park. Additionally, there are an estimated 11 residential structures in the DEZ risk group along Jackson Way (Non-HOA) and Camelot St. These structures lay immediately west of Tranquil Park, also identified as a DEZ risk.

Indirect Exposure Zones- The remaining structures within the Merryfield Homeowners Association footprint remain in the Indirect Exposure Zone (IEZ) risk category. Indirect exposure from fire is of concern to the homeowners in the event a wildfire starting in the Nature Park, or city park, could create a situation involving a running front, and/or hot embers to fall and ignite dwellings with a moderate to elevated risk of home-to-home ignition.

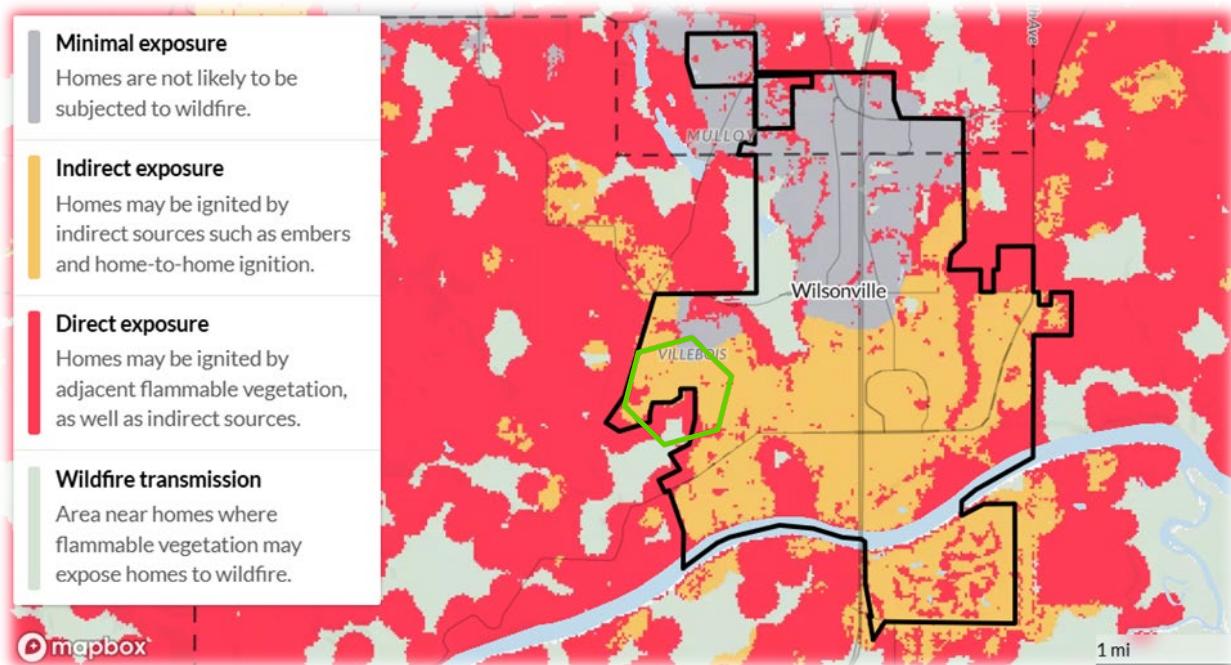
Respectfully, 81% of structures within the City of Wilsonville reside in the IEZ risk category. However, many of these structures are not adjacent to the higher DEZ risk zones as they are within the Merryfield and surrounding Villebois communities.

For reference, the City of Wilsonville, has identified 425 structures in the DEZ risk zone city wide. Structures within the Merryfield community accounts for 12.24% of this total.

Exposed buildings by zone

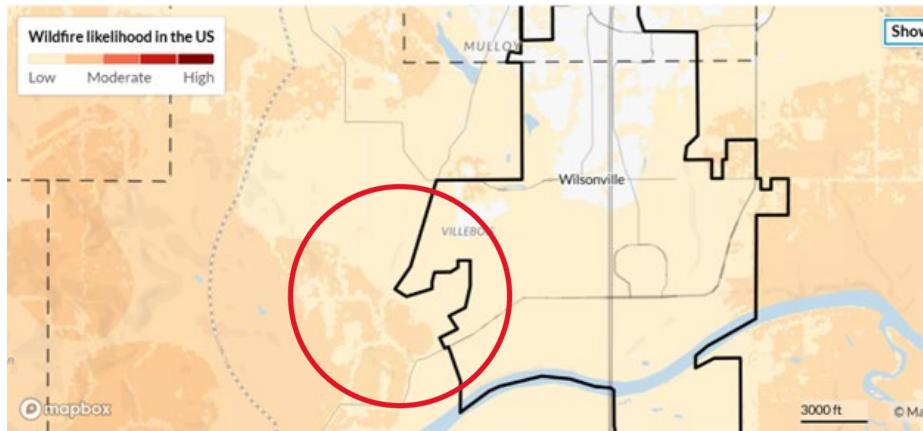


One represents 5% of buildings, or approximately 360 structures



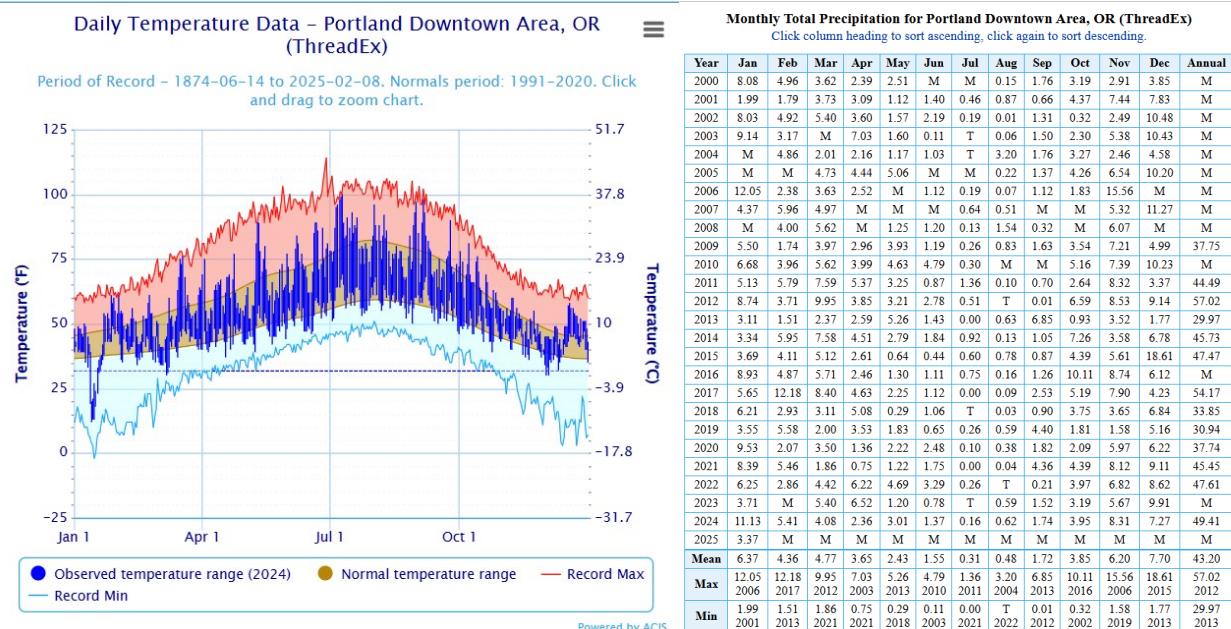
Fire Likelihood

Elevated Risk Component - According to recent data, the City of Wilsonville has a 30% elevated risk for wildfire likelihood when compared to other communities within the US; for homeowners with in the Merryfield community, this risk increases from a Low probability to a Moderate probability when compared to the city interior.



Weather-Predictive weather forecasting accompanied with historical data reports provide an insight to the fire danger probability for any given year. As we have seen in recent years, fire danger in the geographic area has increased with the on slot of higher mean temperatures in the hotter months and a reduction in annual precipitation over the past 10 years.

These hotter temperatures can reduce relative humidity below 50%. Thus, increasing the risk of fire ignition, destabilization in the Equilibrium Moisture Content of grasses, shrubs, and trees, and reduced soil moisture content creating additional fuel and increasing the fire potential.



Historical Events-

- September 2020, the City of Wilsonville declared a local State of Emergency and instituted a curfew for all residents. This was in lieu of the high fire risk after hot dry temperatures and high winds impacted the region.
- March 2019 – A four alarm fire broke out on Southwest Collina Ln, located just north of Graham Oaks Nature Park.

Population Growth - As reported by the city of Wilsonville's own data, the population growth within city limits has increased 35% since the inception of the nature park and is the second fastest growing city in the state of Oregon. Reportedly accounting for an estimated 3964 people per square mile.

This population growth is expected to only increase as the city implements several projects within walking distance of the two forementioned parks. Primarily, the 121- unit Vuela development; currently under construction on Barber St; which is expected to increase foot traffic in the park located 1.5 miles away. In addition to the Vuela, the city is working on the Vertical Housing Development Zone with the intent of providing addition housing and businesses to the Wilsonville area; again, this will cause an increase in park visitations.

This level of population growth will naturally increase the potential for a human caused fire to occur within the boundaries of Graham Oaks Nature Park. As studies have shown, the second highest cause of wildland fires is human caused; second only to lighting. This, in combination with dry hot conditions during the summer months provides an even greater risk to our community as the population interfaces with these nature areas.

Mitigation

An active fire mitigation plan is only effective if homeowners and stakeholders take an active role in identifying the risks as individuals and as a consortium while supporting the overall action plan.

Fuels Reduction – In coordination with local officials and stakeholders, field observations should be made to identify hazards. Examples include but not limited to:

- Defensible Space zones – Create a 30-foot natural or manmade barrier along property lines
- Remove overgrowth of vegetation – including ladder fuels, ground fuels, and trees with low hanging limbs.
- Vegetation Identification – fire resistant species, tall grasses, potential snags, tree height and distance, etc.
- Barriers – Identify natural and manmade obstructions to the spread of fire. Typically, an area or strip devoid of combustible fuel such as pathway and mineral soil exposure.
- Possible areas for Broadcast/Block burning (also known as a prescribed burn)
- Implement a neighborhood Fire Co-Op plan – year-round cooperative between local officials that include permissions to access and reduce vegetation around property lines, access by fire personnel for fire suppression, liaison officers between stakeholders, etc.
- Work with Metro to increase park landscaping schedule (currently, tall grass is mowed once a year)

Defensible Spaces – The priority for owners will need to be concentrated around the Direct Exposure Zones identified earlier in this report. These areas pose a greater risk of fire to our community in their current state with fire fuels encroaching on property lines between homeowners and the Nature Park.

Tualatin Valley Fire and Rescue has helped define proper defensible spaces within the urban boundary. “Defensible landscaping is Critical to reducing the spread of wildfire. Grasses, shrubbery, and tress can easily support fuel fire growth.” (www.tvfr.com/wildfire)

1. Remove Dead plants, grass, weeds, and firewood at least 30 feet from buildings and decks
2. Cut back branches that hang over your roof, sheds, or patio covers.
3. Cut or mow grass and fields to maximum of 4 inches within 30 feet of builds and decks
4. Create vertical space between grass, shrubs, and trees so ground fires can't spread up to the trees
5. Use fire retardant plants

Access points – Homeowners in the DEZ's should be identified and informed of the fire potential. Homeowners with direct or indirect access to the DEZ's willing to provide park access via their property should be noted and added to a Community Fire Management Plan.

Suggested Agenda -

1. Identify all HOA committee members and set roles and responsibilities
2. Identify all stakeholders and community members with a vested interest
3. Invite stakeholder to meet with homeowners in the affected areas, and schedule field observations to assess risk and mitigation needs
4. Develop a stakeholder action plan to mitigate hazards
5. Based on information from stakeholders create a Community Fire Management Plan (CFMP) and/or a Community Emergency Response Plan (CERP) which includes at minimum:
 - Community Safe Zone
 - Access Points
 - Evacuation Plans
 - Before you Go
 - Domestic and Wildlife awareness
 - Notification plans
 - Utility shutoff
6. Provide quarterly updates to homeowners on completed and pending actions as it relates to fire danger.

Possible Stakeholders-

- City of Wilsonville - Planning and Development
- City of Wilsonville – Parks and Recreation
- Metro – Parks and Recreation
 - Arborist/Botanist/Horticulturist
- Tualatin Valley Fire and Rescue – Fire Prevention Officer



Field Observations need to be taken and evaluated for proper planning and mitigation. The map above helps identify potential areas of improvement to better insulate the community from fire.

Sources:

USDA Forest Service wildfirerisk.org

Tualatin Valley Fire and Rescue www.tvfr.com/wildfire

Wildfire Risk to Communities

<https://www.weather.gov/wrh/Climate?wfo=pqr>

<https://www.ci.wilsonville.or.us/>

<https://www.oregonmetro.gov/>

Terminology:

Direct Exposure Zones- homes subjected to wildfire from adjacent flammable wildland vegetation and from indirect sources such as embers. This zone maybe considered to be covered by flammable wildland vegetation. Because of this, homes may be exposed to wildfire through direct flame contact or radiant heat from burning wildland vegetation, as well as indirect sources such as embers transported through the air from vegetation, buildings, or other materials burning nearby.

Wildfire likelihood - is the probability of wildfire burning in any given year. It does not say anything about the intensity of fire if it occurs. At the community level, wildfire likelihood is averaged where housing units occur.

Ground Fuel -Below Surface litter, duff roots, shrubs to support combustion i.e. smolder

Equilibrium Moisture Content - Moisture content that a fuel particle will attain if exposed for an infinite period in an environment of specified constant

Exposure - Property that may be endangered by a fire burning in another structure or by a wildfire.